Attorney Docket No.: 19916004100

PTO/SB/01A (10-00) Approved for use through 10/31/2002. OMB 0651-0032

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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

| As the below named inventor(s), I/we declare that: | | | | | |
|---|---|--|--|--|--|
| This declaration is directed to: | | | | | |
| | The attached application, or | | | | |
| \boxtimes | Application No. 09/827,256, filed on 05 April 2001, | | | | |
| | as amended on (if applicable); | | | | |
| I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought; | | | | | |
| I/ we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above; | | | | | |
| I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including material information which became available between the filing date of the prior application and the National or PCT International filing date of the continuation-in-part application, if applicable; and | | | | | |
| All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon. | | | | | |
| FULL NAME OF INVENTOR(S) | | | | | |
| Inventor one EMPEDOCL | ES, Stephen A. Date: 6/7/01 | | | | |
| Signature: | Citizen of: USA | | | | |
| Inventor two WATSON, A | ndrew R. Date: | | | | |
| Signature: | Citizen of: UK | | | | |
| Inventor three JIN, J | Date: | | | | |
| Signature: | Citizen of: CHINA | | | | |
| Inventor four | Date: | | | | |
| Signature: | Citizen of: | | | | |
| Additional inventors are being named on additional form(s) attached hereto. | | | | | |

Burden Hour Statement: This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is used by the public to file (and the PTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 1 minute to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents. Washington, DC 20231 Patents, Washington, DC 20231.

PA 3138027 vŽ

Attorney Docket No.: 19916004100

PTO/SB/01A (10-00)

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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

As the below named inventor(s), I/we declare that: This declaration is directed to: The attached application, or П Application No. 09/827,256, filed on 05 April 2001, Ø as amended on ____ (if applicable); I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought; I/ we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above; I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including material information which became available between the filing date of the prior application and the National or PCT International filing date of the continuation-in-part application, if applicable; and All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon. **FULL NAME OF INVENTOR(S)** Inventor one ____EMPEDOCLES, Stephen A. ____Date: _____ Citizen of: USA Signature: Date: Inventor two Date: __6/2/0/ Inventor three Citizen of: CHING

Burden Hour Statement: This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is used by the public to file (and the PTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 1 minute to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Date:

additional form(s) attached hereto.

Citizen of:

PA 3138027 v2

Inventor four

Additional inventors are being named on ___

Signature:



PTO/SB/81 (02-01)

Approved for use through 10/31/2002. OMB 0651-0035

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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| | Application Number | 09/827,256 | |
|------------------------|------------------------|--|--|
| | Filing Date | 04/05/2001 | |
| POWER OF ATTORNEY OR | First Named Inventor | EMPEDOCLES et al. | |
| AUTHORIZATION OF AGENT | Title | SPATIAL POSITIONING OF SPECTRALLY LABELED BEADS | |
| AUTHORIZATION OF AGENT | Group Art Unit | | |
| | Examiner Name | | |
| | Attorney Docket Number | 19916004100 | |
| | | | |

| I hereby a | ppoint: | | | | | Place Customer | |
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| ☑ Practiti AND | oners at Cu | stomer Number | 20350 | | | Number Bar Code Label here | |
| | ☑ Practitioner(s) named below: | | | | | | |
| | | Name | | | Registration | on Number | |
| | | KENNETH BAROVSKY, ESQ. | | | 36,442 | | |
| | | | | | -t-v | | |
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| | | | | † | | | |
| \ \ \ - | Maraci (-) | r 000nt/c) to === | cocute the application is | dentified | ahove and to | transact all | |
| as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith. | | | | | | | |
| Please cha | nge the cor | respondence add | ress for the above-iden | itified ap | plication to: | | |
| | | ned Customer Nur | | | | | |
| OR | | | | | | | |
| Firm <i>or</i> | ual Name | MARK D. BARRISH | | | | | |
| Address | | | | | | | |
| Address | | | | | | | |
| City | | | | State | | ZIP | |
| Country | | | | | | | |
| Telephone | | | | Fax | | | |
| I am the: | | · · · · · · · · · · · · · · · · · · · | | | | | |
| Applicant/Inventor. | | | | | | | |
| Assignee of record of the entire interest. See 37 CFR 3.71. | | | | | | | |
| Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96). | | | | | | | |
| SIGNATURE of Applicant or Assignee of Record | | | | | | | |
| Name | KENNE | TH BAKOVSKY | V.P. & Intellectual Prop | erty Cou | ınsel | | |
| Signature / LUU) | | | | | | | |
| Date 11. Two Oh | | | | | | | |
| NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. | | | | | | | |
| Submit multiple forms if more than one signature is required, see below*. *Total of 1 form(s) is submitted. | | | | | | | |
| M Total of Trothi(s) is submitted. | | | | | | | |

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PTO/SB/96 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

5, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Under the P Attorney Docket No. 19916004100 STATEMENT UNDER 37 CFR 3.73(b) EMPEDOCLES, et al. Applicant/Patent Owner: 04/05/2001 Application No./Patent No.: 09/827,256 Filed/Issue Date: Entitled: SPATIAL POSITIONING OF SPECTRALLY LABELED BEADS QUANTUM DOT CORPORATION , a <u>California Corporation</u> (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.) (Name of Assignee) states that it is: the assignee of the entire right, title, and interest; or Ø an assignee of an undivided part interest 2. in the patent application/patent identified above by virtue of either: A. An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel _____, Frame ____, or for which a copy thereof is attached. B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below: 1. From: The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached. 2. From: __ The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached. To : 3. From: __ The document was recorded in the United States Patent and Trademark Office at

☐ Copies of assignments or other documents in the chain of title are attached.

Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.8]

The undersigned (whose title is supplied below) is empowered to sign this statement on behalf

11 Jun \$1

KENNETH BAROVSKY Typed or printed name VICE PRESIDENT & INTELLECTUAL PROPERTY COUNSEL

Title

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

3 AUGUST 2001

Date

U.S. Department of Commerce cordation Form Cover Sheet U.S. Patent and Trademark Office (Rev. 03-01) OMB No. 0651-0027 (exp. 5/31/2002) PATENTS ONLY Tab settings ⇒ ⇒ ▼ To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof 2. Name and address of receiving party(ies) 1. Name of conveying party(ies): EMPEDOCLES, STEPHEN A. Name: QUANTUM DOT CORPORATION WATSON, ANDREW R. Internal Address: 26118 Research Road JIN, JIAN Additional name(s) of conveying parties attached?

Yes

No. Street Address: ____ 3. Nature of conveyance: Hayward State: CA ZIP: 94545 Merger ☐ Change of Name Security Agreement Additional names and addresses attached? ☐ Yes ☒ No Other: _____ Execution Date: 06/02/01; 06/04/01 and 06/07/01 4. Application number(s) or patent number(s). If this document is being filed together with a new application, the execution date of the application is: Patent No(s): 09/827,256 Patent Application No(s): Additional numbers attached? ☐ Yes ☒ No 6. Total number of applications and patents involved 1 Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41): -----\$40.00 Name: Mark D. Barrish TOWNSEND AND TOWNSEND AND CREW LLP ☐ Enclosed Two Embarcadero Center, 8th Floor San Francisco, California 94111-3834 Authorized to be charged to deposit account (415) 576-0200 8. Deposit account number: 20-1430 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE Statement and signature. To the best of my knowledge and belief, the foregoing is true and correct and any attached copy is a true of copy of the original document.

Total number of pages including cover sheet, attachments and document

Mail documents to be recorded with required cover to:
Commissioner of Patents and Trademarks, Box Assignments
Washington, D.C. 20231

Mark D. Barrish

Name of Person Signing Atty. Reg. No. 36,443

Attorney Docket No.: 19916-004100US

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, STEPHEN A. EMPEDOCLES, of 2507 Mardell Way, Mountain View, CA 94043; ANDREW R. WATSON, of 1 Spring Lane, Belmont, CA 94002; and JIAN JIN, of 2137 California Street, Berkeley, CA 94703; hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:

SPATIAL POSITIONING OF SPECTRALLY LABELED

BEADS

Date(s) of execution of Declaration: $\frac{06/2/01}{06/4/01}$, $\frac{906/7/01}{06/4/01}$

Filing Date:

April 5, 2001

Application No.:

09/827,256; and

WHEREAS, QUANTUM DOT CORP., a corporation of the State of California, located at 26136 Research Road, Hayward, CA, 94545, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors. Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: ANDREW R. WATSON Dated:

ЛАN JIN

Attorney Docket No.: 19916-004100US

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, STEPHEN A. EMPEDOCLES, of 2507 Mardell Way, Mountain View, CA 94043; ANDREW R. WATSON, of 1 Spring Lane, Belmont, CA 94002; and JIAN JIN, of 2137 California Street, Berkeley, CA 94703; hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:

SPATIAL POSITIONING OF SPECTRALLY LABELED

BEADS

Date(s) of execution of Declaration: $\frac{06}{201}$: $\frac{06}{401}$: $\frac{4}{06}$ 701

Filing Date:

April 5, 2001

Application No.:

09/827,256; and

WHEREAS, QUANTUM DOT CORP., a corporation of the State of California, located at 26136 Research Road, Hayward, CA, 94545, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

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IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

| Dated: | · |
|----------------|-----------------------|
| | STEPHEN A. EMPEDOCLES |
| Dated: 6/4/201 | A.R. Wat |
| | ANDREW R. WATSON |
| Dated: 6/02/0/ | Low |
| | JIAN KA |